UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,025	11/20/2006	Stephen Behr	41313-1004	2195
25213 HELLER EHR	7590 11/13/2007 RMAN LLP	EXAMINER		
275 MIDDLEFIELD ROAD			MI, QIUWEN	
MENLO PARK, CA 94025-3506			ART UNIT	PAPER NUMBER
			1655	
			MAIL DATE	DELIVERY MODE
			11/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Summers	10/533,025	BEHR ET AL.				
Office Action Summary	Examiner	Art Unit				
	Qiuwen Mi	1655				
The MAILING DATE of this communication app Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDO	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on <u>20 September 2007</u> .						
,	, 					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
closed in accordance with the practice under E	x parte Quayle, 1935 С.D. 11,	453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>26 and 30-53</u> is/are pending in the application.						
4a) Of the above claim(s) 34 and 36-44 is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>26,30-33,35 and 45-53</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)⊠ The specification is objected to by the Examine	er.	•				
10)⊠ The drawing(s) filed on <u>4/26/05</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Burea * See the attached detailed Office action for a list	es have been received. Is have been received in Applic Prity documents have been rece u (PCT Rule 17.2(a)).	eation No eived in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview Summ					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Ma 5) Notice of Inform	al Patent Application				
Paper No(s)/Mail Date	6) Other:	•				

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, species "MMP-9" for claim 26, "stimulate collagen production" for claim 30, and "Chenopodium quinoa" for claim 26 in the reply filed on 9/20/07 is acknowledged. The traversal is on the ground that Cyr does not disclose dermatological formulations. This is found persuasive. However, as stated below, since JP 2000336024 teaches cosmetic (dermatological) compositions containing one or more humectant plant extracts of Chenopodium quinoa etc. for dry skin, there is no special technical feature in the application. Applicant also argues that searching for all the claims is not a burden. This is not found persuasive because as indicated in the previous Office Action, the inventions of Groups I-II are two distinct inventions for the reason of the record. They have different electronic resources and search queries, and searching for one subject matter will not necessarily lead to another. Applicant is reminded of the extensive literature search in biotechnology which is not co-extensive.

Claims 34, and 36-44 are withdrawn from further consideration as being drawn to nonelected inventions or species.

Claims Pending

Claims 30-53 are newly submitted. Claims 1-25, and 27-29 are cancelled. Claims 26, and 30-53 are pending. Claims 34, and 36-44 are withdrawn as they are directed toward a non-elected invention groups or species. Claims 26, 30-33, 35, and 45-53 are examined on the merits.

Abstract Objections

The Abstract has been objected to, and Applicant is suggested to delete "The present invention provides for" on lines 1, 5, 6, and 8 of the Abstract to be more clear and concise. The first letter of "plant" in lines 1 and 9, and "a" in line 6 should be capitalized after the deletion.

Claim Rejections -35 USC § 112, 1st

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 48, 49, and 53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Skin aging or dermatological conditions cannot be prevented. There is no evidence that one would not ever get skin aging by consuming the claimed plant extracts of

Chenopodium quinoa. Unless Applicant can show on the record that skin aging would be completely prevented in every instance, Applicant is requested to cancel the word "preventing".

Claims 48, 49, and 53 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating skin aging, does not reasonably provide enablement for preventing skin aging. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

It is a common sense that skin aging is inevitable, no matter what plant extracts are being used, the skin of a seventy year old will never look the same as the skin of a one year old. As evidenced by Goihman-Yahr (U, Clinics in Dermatology 14: 153-160, 1996), skin aging is a continuous phenomenon, and it is a result of programmed senescence and prolonged environmental injury to the skin (see the entire article). As mentioned above, the invention only provides the description treating skin aging, and no description prevent skin aging is being disclosed in the specification. It is the opinion of the Examiner, in light of inevitable chronologic skin aging, that Applicant is not enabled for preventing skin aging as instantly claimed.

Considering this evidence, the skilled artisan, lacking information with regard to preventing skin aging, would necessarily need to perform tedious trial and error protocols without expectation of success in order to provide for the claimed activity.

"Inventor should be allowed to dominate future patentable inventions of others where those inventions were based in some way on his teachings, since such improvements while unobvious from his teachings, are still within his contribution, since improvement was made possible by his work; however, he must not be permitted to achieve this dominance by claims which are insufficiently supported and, hence, not in compliance with first paragraph of 35 U.S.C. 112; that paragraph requires that scope of claims must bear a reasonable correlation to scope of enablement provided by specification to persons of ordinary skill in the art; in cases involving predictable factors, such as mechanical or electrical elements, a single embodiment provides broad enablement in the sense that, once imagined, other embodiments can be made without difficulty and their performance characteristics predicted by resort to known scientific law; in cases involving unpredictable factors, such as most chemical reactions and physiological activity, scope of enablement varies inversely with degree of unpredictability of factors involved." (Emphasis added)

Due to the large quantity of experimentation necessary to generate the infinite number of variants/fragments recited in the claims and possibly screen same for activity and the lack of guidance/direction provided in the instant specification, this is merely an invitation to the skilled artisan to use the current invention as a starting point for further experimentation. Thus, undue experimentation would be required for a skilled artisan to make and/or use the claimed invention commensurate in scope with the claims.

Claim Rejections -35 USC § 112, 2nd

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 30, 47, and 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 30, Applicant is required to spell out the abbreviation UV in line 3.

Claim 47 recites the limitation "the skin in a subject" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Although claim 51 is not specifically recited for containing indefinite matter, because these claims are dependant upon claim 47, claim 51 necessarily comprise all of the limitations of claim 47. Because claim 51 do not remedy the indefiniteness of claim 47, these claims are also properly rejected under this statute.

Claim Rejections -35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

⁽e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

Application/Control Number: 10/533,025

Art Unit: 1655

patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 26, 30-33, 35, and 45-53 are rejected under 35 USC § 102 (b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 2000336024A (N) (see Abstract and full translation).

JP 2000336024 A teaches cosmetic (dermatological) compositions containing one or more humectant plant extracts of *Chenopodium quinoa* etc for dry skin (see Abstract). JP 2000336024A teaches a sample preparation of lotion (thus topical, administering to a subject) comprising purified water (physiologically acceptable carrier), polyethylene glycol 1000 (moisturizing agent), and Quinua (the same as *Chenopodium quinoa*, see page 4, [0008]) in 20% EtOH extract (solvent extraction) (alcoholic solvent) (see full translation, page 27, [0085]). JP 2000336024 also teaches that composition of cosmetics that contain moisture-retaining plant extracts with sustained moisture-retention effects over extended periods, and possess properties effective for skin treatments that prevent, alleviate, or improve such conditions as dryness, rough skin, cracks, chaps, dandruff, pruritus and inflammatory diseases (maintain and/or improve the health and/or appearance of the skin in a subject) (see page 32, [0100]). JP 2000336024 further teaches Quinua extract in 30% PG (propylene glycol, see page 24, [0074]) in test solutions (see page 26, Table 2).

Application/Control Number: 10/533,025

Art Unit: 1655

The intended use of the composition was analyzed for patentable weight. It is deemed that the preamble 'breathes life' into the claims in that the prior art product must not be precluded for use as inhibiting the activity of matrix metalloprotease-9 (MMP-9) or increasing collagen production. It is deemed that the composition disclosed by JP 2000336024A is not precluded for carrying out the intended function of the claims because the referenced composition comprises the one and the same ingredient disclosed by Applicant as having the claim-designated functions.

Consequently, the claimed method and composition appears to be anticipated by the references, although the reference does not explicitly teach that plant extracts of *Chenopodium quinoa* inhibit the activity of matrix metalloprotease-9 (MMP-9) or increase collagen production.

In the alternative, even if the claimed invention is not identical to the referenced composition/method with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the referenced method is likely to inherently possess the same characteristics of the claimed method composition particularly in view of the similar characteristics which they have been shown to share. Since the cited reference teaches the claimed plant extract (*Chenopodium quinoa*) with the claimed properties, namely, effective for skin treatments that prevent, alleviate, or improve such conditions as dryness, rough skin, cracks, chaps, dandruff, pruritus and inflammatory diseases, it is deemed that inhibiting the activity of matrix metalloprotease-9 (MMP-9) or increase collagen production is the intrinsic mechanism/pathway of the claimed plant extract. Thus, the claimed method would have been obvious to those of ordinary skill in the art with the meaning of U.S.C. 103.

Application/Control Number: 10/533,025

Art Unit: 1655

It would have been prima facie obvious to one practicing the invention to use the composition taught by JP 2000336024A to provide a method for maintaining and/or improving the health and/or appearance of the skin, attenuating or reducing the risk of skin aging, or dermatological condition.

Accordingly, the claimed invention as a whole was at least *prima facie* obvious, if not anticipated by the reference, especially in the absence of sufficient, clear, and convincing evidence to the contrary.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qiuwen Mi whose telephone number is 571-272-5984. The examiner can normally be reached on 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/533,025 Page 10

Art Unit: 1655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Qiuwen Mi

MICHELE FLOOD
PRIMARY EXAMINER